

WHAT IS CLAIMED IS:

1. An animal litter apparatus for gathering pet waste, comprising:  
an outer tube including an open end;  
5 means for holding a closed end of a disposable bag within the outer tube;  
means for moving the apparatus between open and closed configurations; and  
a clamp assembly for grasping the waste as the apparatus moves from  
10 the open configuration to the closed configuration, connected generally about a perimeter of the outer tube open end;  
wherein the clamp assembly brings the waste into the bag as the apparatus moves from the open configuration to the closed configuration.
- 15 2. The apparatus of claim 1, including an inner tube slidably movable within the outer tube, and positioned within and coaxial with the outer tube along a longitudinal axis.
- 20 3. The apparatus of claim 2, wherein the holding means is connected to the inner tube.
4. The apparatus of claim 2, including a spring connecting the inner tube to the moving means.
- 25 5. The apparatus of claim 2, wherein the inner tube moves away from the open end of the outer tube, pulling the bag further within the outer tube as the apparatus moves from the open configuration to the closed configuration.
- 30 6. The apparatus of claim 2, including a gear assembly operationally connecting the inner tube and the outer tube.

7. The apparatus of claim 1, wherein the outer tube is rotatable about a longitudinal axis, and the clamp assembly is connected to the outer tube to rotate with the outer tube, twisting an open end of the bag closed.

5           8. The apparatus of claim 1, wherein the clamp assembly includes at least two jaws, pivotally movable towards the open end of the outer tube as the apparatus moves from the open configuration to the closed configuration.

10           9. The apparatus of claim 8, wherein the outer tube surrounds a portion of the jaws as the apparatus moves from the open configuration to the closed configuration.

15           10. The apparatus of claim 1, wherein the holding means includes a clamp.

            11. The apparatus of claim 10, wherein the clamp includes two grips for holding the bag therebetween.

20           12. The apparatus of claim 1, wherein the outer tube is operationally connected to the clamp assembly whereby slidable movement of the outer tube along a longitudinal axis away from and towards the clamp assembly respectively opens and closes the clamp assembly.

25           13. The apparatus of claim 1, wherein the moving means includes a trigger assembly operationally connected to the holding means.

            14. The apparatus of claim 13, wherein the moving means includes a handle portion operationally connected to the outer tube.

30           15. The apparatus of claim 14, including an inner tube slidably movable within the outer tube, the inner tube positioned within and coaxial with the outer tube along a longitudinal axis, the handle portion including at least two

spur gears, the outer tube including a plurality of grooves, the inner tube including a first gear drive and a second gear drive, wherein the spur gears pivot between the grooves of the outer tube and the gear drives of the inner tube whereby the handle portion operationally connects the inner tube and the outer tube.

16. An animal litter apparatus for gathering pet waste, comprising:  
an outer tube including an open end;

an inner tube slidably movable within the outer tube, and positioned within and coaxial with the outer tube along a longitudinal axis;

means for holding a closed end of a disposable bag within the outer tube;

means for moving the apparatus between open and closed configurations; and

a clamp assembly for grasping the waste as the apparatus moves from the open configuration to the closed configuration, connected generally about a perimeter of the outer tube open end, the outer tube operationally connected to the clamp assembly whereby slidable movement of the outer tube along a longitudinal axis away from and towards the clamp assembly respectively opens and closes the clamp assembly;

wherein the clamp assembly brings the waste into the bag as the apparatus moves from the open configuration to the closed configuration, the outer tube is rotatable about a longitudinal axis, and the clamp assembly is connected to the outer tube to rotate with the outer tube, twisting an open end of the bag closed.

17. The apparatus of claim 16, wherein the holding means is connected to the inner tube.

18. The apparatus of claim 16, including a spring connecting the inner tube to the moving means.

19. The apparatus of claim 16, wherein the inner tube moves away from the open end of the outer tube, pulling the bag further within the outer tube as the apparatus moves from the open configuration to the closed configuration.

5                   20. The apparatus of claim 16, including a gear assembly operationally connecting the inner tube and the outer tube.

10                   21. The apparatus of claim 16, wherein the clamp assembly includes at least two jaws, pivotally movable towards the open end of the outer tube as the apparatus moves from the open configuration to the closed configuration, and the outer tube surrounding a portion of the jaws as the apparatus moves from the open configuration to the closed configuration.

15                   22. The apparatus of claim 16, wherein the holding means includes a clamp having two grips for holding the bag therebetween.

20                   23. The apparatus of claim 16, wherein the moving means includes a trigger assembly operationally connected to the inner tube and holding means, a handle portion operationally connected to the outer tube, and the handle portion including at least two spur gears, the outer tube including a plurality of grooves, the inner tube including a first gear drive and a second gear drive, wherein the spur gears pivot between the grooves of the outer tube and the gear drives of the inner tube whereby the handle portion operationally connects the inner tube and the outer tube.

25                   24. An animal litter apparatus for gathering pet waste, comprising:  
an outer tube including an open end and rotatable about a longitudinal axis;

30                   an inner tube slidably movable within the outer tube, and positioned within and coaxial with the outer tube along the longitudinal axis;

means for holding a closed end of a disposable bag within the outer tube including a clamp;

means for moving the apparatus between open and closed configurations including a trigger assembly operationally connected to the holding means; and

5 a clamp assembly for grasping the waste as the apparatus moves from the open configuration to the closed configuration, connected generally about a perimeter of the outer tube open end and connected to the outer tube to rotate with the outer tube, twisting an open end of the bag closed.

10 wherein the clamp assembly brings the waste into the bag as the apparatus moves from the open configuration to the closed configuration, and the outer tube is operationally connected to the clamp assembly whereby slidable movement of the outer tube along the longitudinal axis away from and towards the clamp assembly respectively opens and closes the clamp assembly.

15 25. The apparatus of claim 24, including a spring connecting the inner tube to the moving means and a gear assembly operationally connecting the inner tube and the outer tube, wherein the holding means is connected to the inner tube, and the inner tube moves away from the open end of the outer tube, pulling the bag further within the outer tube as the apparatus moves from the open configuration to the closed configuration.

20 26. The apparatus of claim 24, wherein the clamp assembly includes at least two jaws, pivotally movable towards the open end of the outer tube as the apparatus moves from the open configuration to the closed configuration, and the outer tube surrounds a portion of the jaws as the apparatus moves from the open configuration to the closed configuration.

25 27. The apparatus of claim 24, wherein the clamp includes two grips for holding the bag therebetween.

30 28. The apparatus of claim 24, wherein the moving means includes a handle portion operationally connected to the outer tube and having at least two

spur gears, the outer tube including a plurality of grooves, the inner tube including a first gear drive and a second gear drive, wherein the spur gears pivot between the grooves of the outer tube and the gear drives of the inner tube whereby the handle portion operationally connects the inner tube and the outer tube.